

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1 (currently amended): A projector comprising:

5        a housing;  
          a light source installed in the housing;  
          a color wheel for separating the light from the light source into color light;  
          an image modulator for modulating the color light from the color wheel, and  
          projecting the color light to form an image on a screen;

10      a scalar connected to the image modulator for controlling the image modulator to  
          create a plurality of gray-level images for each of one or more predetermined  
          colors; and  
          a control circuit for projecting an on screen display (OSD) on a screen, the OSD  
          comprising the plurality of gray-level images created by the scalar, and for  
15      adjusting a color wheel delay of the projector until the gray-level images  
          corresponding to each color display the proper color on the OSD, thereby  
          synchronizing the color wheel with the image modulator connected to the image  
          modulator for controlling the image modulator to operate synchronously with  
          the color wheel; and

20      a scalar connected to the image modulator for generating a gray-level image signal;  
          wherein the color light is modulated to form a gray-level image on the screen through  
          a gray-level image signal outputted to the image modulator, and the image  
          modulator is controlled to operate synchronously with the color wheel according  
          to the gray-level image.

25      2 (original): The projector of claim 1 wherein the image modulator is a digital  
          micromirror device (DMD).

3 (original): The projector of claim 1 wherein the gray-level image has 32 gray-levels.

4 (original): The projector of claim 1 wherein gray-level images are generated for 3

5 colors.

5 (original): The projector of claim 4 wherein the 3 colors having gray-level images are red, green, and blue.

10 6 (currently amended): A method for adjusting a projector, the projector comprising a color wheel for separating light into color light, a image modulator for modulating the color light from the color wheel, and a control circuit for controlling the image modulator to operate synchronously with the color wheel, the method comprising:

(a) ~~providing a scalar;~~

15 (b) ~~using the a scalar to control the image modulator to display a plurality of gray-level images for at least one predetermined color on a screen create a plurality of gray-level images for each of one or more predetermined colors; and~~

(c) ~~according to the plurality of gray-level images corresponding to the predetermined color, using the control circuit to control the image modulator to operate according to rotation of the color wheel for accurately projecting an image on the screen.~~

utilizing a control circuit to project an on screen display (OSD) on a screen, the OSD comprising the plurality of gray-level images created by the scalar; and  
adjusting a color wheel delay of the projector with the control circuit until the gray-level images corresponding to each color display the proper color on the OSD, thereby synchronizing the color wheel with the image modulator.

25 7 (cancelled).

8 (original): The method of claim 6 wherein the image modulator is a digital micromirror device (DMD).

5 9 (original): The method of claim 6 wherein the gray-level image has 32 gray-levels.

10 (original): The method of claim 6 wherein gray-level images are generated for 3 colors.

10 11 (original): The projector of claim 10 wherein the 3 colors having gray-level images are red, green, and blue.